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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/826,151

04/16/2004

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1-23-8

8593

7590 08/19/2008
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EXAMINER

PHAN, HANH

ART UNIT

PAPER NUMBER

2613

MAIL DATE

DELIVERY MODE

08/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/826,151	Applicant(s) HAXELL ET AL.	
	Examiner Hanh Phan	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-12, 14-17, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 5, 13 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 05/20/2008.
2. The indicated allowability of claims 2-4, 7-12, 15 and 16 is withdrawn in view of the newly discovered reference(s) to Lahat et al (US Patent no. 6,417,944), Soderberg et al (US Patent No. 7,349,629) and Kalkunte et al (US Patent No. 5,774,658).
Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "**said synchronizing step**" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 14, 9 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Lahat et al (US Patent No. 6,417,944).

Regarding claims 1 and 14, referring to Figures 1-3, Lahat et al teaches a method for communicating in a time-domain wavelength interleaved network having a hub node (i.e., optical switch module 14, Fig. 1), comprising:

transmitting substantially all communications (i.e., transmitting all communications are output from the receive/transmit interface modules 12, Fig. 1) through the hub node (i.e., optical switch module 14, Fig. 1) without changing a wavelength of the communications at the hub node (i.e., Figs. 1-3, col. 6, lines 36-67, col. 7, lines 1-67, col. 8, lines 1-67, col. 9, lines 1-30 and col. 10, lines 42-67).

Regarding claim 9, referring to Figures 1-3, Lahat et al teaches a node (i.e., receive/transmit interface module 12, Fig. 1) in a time-domain wavelength interleaved network having a hub node (i.e., optical switching module 14, Fig. 1), comprising:

a tunable laser (i.e., tunable optical transmitter 36, Fig. 2) directed toward the hub node (i.e., optical switching module 14, Fig. 1);

a wavelength dropper (i.e., optical filter 50, Fig. 2) for dropping signals having a wavelength associated with the node only from a fiber coming from the hub node (i.e., optical switching module 14, Fig. 2), wherein substantially all communications in the time-domain wavelength interleaved network are transmitted through the hub node without changing a wavelength of the communications at the hub node (i.e., Figs. 1-3,

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col. 6, lines 36-67, col. 7, lines 1-67, col. 8, lines 1-67, col. 9, lines 1-30 and col. 10, lines 42-67).

Regarding claim 19, Lahat et al teaches further comprising a plurality of the nodes interconnected in a tree configuration (i.e., Figs. 1-3).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-4, 10-12 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lahat et al (US Patent No. 6,417,944) in view of Kalkunte et al (US Patent No. 5,774,658).

Regarding claims 2, 10 and 15, Lahat et al differs from claims 2, 10 and 15 in that he fails to teach the step of synchronizing a transmission and reception of a message such that a message sent in a time-slot K by a node Ni is received by a node Nj in the time slot k. Kalkunte et al, from the same field of endeavor likewise teaches an arrangement for accessing media in a network having multiple access nodes (Figure 1). Kalkunte et al further teaches the step of synchronizing a transmission and reception of a message such that a message sent in a time-slot K by a node Ni is received by a node Nj in the time slot k (i.e., Figures 1, 2 and 4A-4F, col. 3, lines 55-67 and col. 4, lines 1-51). Based on this teaching, it would have been obvious to one having skill in the

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art at the time the invention was made to incorporate the step of synchronizing a transmission and reception of a message such that a message sent in a time-slot K by a node Ni is received by a node Nj in the time slot k as taught by Kalkunte et al in the system of Lahat et al. One of ordinary skill in the art would have been motivated to do this since allowing providing an arrangement that controls access to a network media in network having stations using time slot multiple access protocol and stations using only a carrier sense protocol.

Regarding claims 3, 11 and 16, the combination of Lahat et al and Kalkunte et al teaches wherein the synchronizing step is performed by the hub node (i.e., Figs. 1, 2 and 4A-4F of Kalkunte et al, col. 3, lines 55-67, col. 4, lines 1-51, col. 5, lines 22-67 and col. 6, lines 1-67).

Regarding claims 4, 12 and 17, the combination of Lahat et al and Kalkunte et al teaches wherein the hub node imposes a timing reference (i.e., Figs. 1, 2 and 4A-4F of Kalkunte et al, col. 3, lines 55-67, col. 4, lines 1-51, col. 5, lines 22-67 and col. 6, lines 1-67).

9. Claims 6 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soderberg et al (US Patent No. 7,349,629) in view of Lahat et al (US Patent No. 6,417,944).

Regarding claim 6, referring to Figure 1D, Soderberg et al teaches a method for communicating performed by an interior node (i.e., hub 12(N), Fig. 1D) in a time domain

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wavelength interleaved network having a hub node (i.e., hub 12(1), Fig. 1D), comprising:

sending substantially all communications received from the hub node (i.e., hub 12(1), Fig. 1D) having a wavelength indicating the communication is destined for another node on all branches outward from the hub node (i.e., Fig. 1D, col. 1, lines 47-60).

Soderberg et al differs from claim 6 in that fails to specifically teach without change a wavelength of the communication at the hub node. Lahat et al, from the same field of endeavor likewise teaches a method for communicating in a time domain wavelength interleaved network having a hub node (Figures 1-3). Lahat et al further teaches without change a wavelength of the communication at the hub node (i.e., Figs. 1-3, col. 6, lines 36-67, col. 7, lines 1-67, col. 8, lines 1-67, col. 9, lines 1-30 and col. 10, lines 42-67). Based on this teaching, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the without change a wavelength of the communication at the hub node as taught by Lahat et al in the system of Soderberg et al. One of ordinary skill in the art would have been motivated to do this since allowing providing an all optical switching fabric to perform switching functions and reducing the cost of whole system.

Regarding claim 20, the combination of Soderberg et al and Lahat et al teaches further comprising a plurality of trees of nodes, each of the trees having a hub node, each of the hub nodes interconnected in a ring configuration (i.e., Fig. 1D of Soderberg et al).

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10. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soderberg et al (US Patent No. 7,349,629) in view of Lahat et al (US Patent No. 6,417,944) and further in view of Kalkunte et al (US Patent No. 5,774,658).

Regarding claim 7, the combination of Soderberg et al and Lahat et al differs from claim 7 in that it fails to teach the step of synchronizing a transmission and reception of a message such that a message sent in a time-slot K by a node Ni is received by a node Nj in the time slot k. Kalkunte et al, from the same field of endeavor likewise teaches an arrangement for accessing media in a network having multiple access nodes (Figure 1). Kalkunte et al further teaches the step of synchronizing a transmission and reception of a message such that a message sent in a time-slot K by a node Ni is received by a node Nj in the time slot k (i.e., Figures 1, 2 and 4A-4F, col. 3, lines 55-67 and col. 4, lines 1-51). Based on this teaching, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the step of synchronizing a transmission and reception of a message such that a message sent in a time-slot K by a node Ni is received by a node Nj in the time slot k as taught by Kalkunte et al in the system of the combination of Soderberg et al and Lahat et al. One of ordinary skill in the art would have been motivated to do this since allowing providing an arrangement that controls access to a network media in network having stations using time slot multiple access protocol and stations using only a carrier sense protocol.

Regarding claim 8, the combination of Soderberg et al, Lahat et al, and Kalkunte et al teaches wherein the synchronizing step is performed by the hub node (i.e., Figs. 1,

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2 and 4A-4F of Kalkunte et al, col. 3, lines 55-67, col. 4, lines 1-51, col. 5, lines 22-67 and col. 6, lines 1-67).

Allowable Subject Matter

11. Claims 5, 13 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

12. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

/Hanh Phan/

Primary Examiner, Art Unit 2613

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